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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,510	01/18/2005	Jorg Kuchen	KUCHEN ET AL 1 (PCT)	1985
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COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER HAUPT, KRISTY A	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,510	<b>Applicant(s)</b> KUCHEN ET AL.	
	<b>Examiner</b> KRISTY A. HAAPT	<b>Art Unit</b> 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-19,21,22 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-19,21,22 and 24-28 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is in response to Applicant's Request for Continued Examination filed 10 January 2008. Claims 1, 3-19, 21-22 and 24-28 are pending with claims 1 and 19 in independent form. Claims 2, 20 and 23 have been cancelled. Claims 27 and 28 are newly added.

#### ***Claim Objections***

1. Claims 12 and 21 are objected to because of the following informalities:
  - Claim 12 states "*the optical* screen..." in line 3 of the claim. There is a lack of antecedent basis for this in claim 1 from which it depends. Applicant also deleted "is" using a strike through in line 3 of the claim. The Examiner believes Applicant meant to strike through "that" for grammatical correctness.
  - Claim 21 depends from a cancelled claim (Claim 20). The Examiner believes Applicant meant to depend claim 21 from independent claim 19. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1, 3-4, 6-8, 12-13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Conversano et al. US 5,256,866.

Conversano teaches:

With respect to claim 1:

- An image capturing apparatus with an image capturing unit and an image fitting surface wherein the optical axis of the image capturing unit is disposed at an angle  $\alpha$  to a normal of the image fitting surface in a region in which the optical axis meets the image fitting surface and in which the normal traverses the image fitting surface (Column 4, Lines 12-29) and further comprising a screen in a region of the image fitting surface, said screen being made from a light-impervious material (Column 4, Lines 30-35 teaches the tip of the housing or screen that surrounds the region of the image to be captured can be made of stainless steel, which is a light-impervious material)

With respect to claim 3 and incorporating all limitations of claim 1:

- Wherein the angle  $\alpha$  is less than 30 degrees (Column 4, Lines 18-26 where the angle can be varied)

With respect to claim 4 and incorporating all limitations of claim 1:

- Wherein the image capturing unit comprises an angle of sight  $\beta$  of less than 30 degrees (Column 4, Lines 15-20)

With respect to claim 6 and incorporating all limitations of claim 1:

- Wherein the angle  $\alpha$  is at least half the size of the angle of sight  $\beta$  of the image capturing unit (Column 4, Lines 15-21)

With respect to claim 7 and incorporating all limitations of claim 1:

- Wherein an optical device is disposed between the image capturing unit and the image fitting surface (Figure 6 teaches a spherical lens, #64, is between the CCD, #34, and the fitting surface, #66)

With respect to claim 8 and incorporating all limitations of claim 1:

- Comprising a lighting device (Figure 6 teaches a light source, #62)

With respect to claim 12 and incorporating all limitations of claim 1:

- Wherein the optical screen is disposed outside of a light path of the image capturing unit (Column 4, Lines 30-35 teach the tip of the housing or screen that surrounds the region of the image to be captured can be made of stainless steel, which is a light-impervious material, where the part of the tip (Figure 1, #14) that is made of stainless steel is outside of the light path)

With respect to claim 13 and incorporating all limitations of claim 12:

- Wherein the optical screen is disposed between the image fitting surface and the image capturing unit and/or a lighting device (Figure 6 teaches the optical screen (the upper and lower surfaces of tip (#'s 17 and 18 respectively) that can be made of stainless steel (Column 4, Lines 30-35) are located between the image fitting surface (#66) and LED (#62))

With respect to claim 17 and incorporating all limitations of claim 1:

- Comprising a positioning device (Abstract teaches a scanning window)

3. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Slatter et al. EP 0 984 319 A1.

Slatter teaches:

With respect to claim 19:

- Capturing an image shown in a display that is substantially placed onto an image fitting surface (Page 4, Paragraph 0030 and Page 7, Claim 1) wherein an image capturing unit is held obliquely relative to the display (Figure 3 teaches camera (#20) is at an oblique angle to the sheet of paper (#54)) and the image fitting surface is positioned between the display and the image capturing unit (Page 4, Paragraph 0030 and Page 7, Claim 1)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-11 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conversano et al. US 5,256,866 in view of Seo US 6,306,095.

Conversano fails to teach:

With respect to claim 9:

- Wherein the lighting device comprises light-emitting diodes as the light-emitting means

With respect to claim 10:

- Wherein the light-emitting means are disposed in immediate proximity to the image capturing unit

With respect to claim 11:

- Wherein the lighting device comprises colored light-emitting means

With respect to claim 26:

- For reading an optical code that is preferably displayed on a display or on a specular reflecting surface

With respect to claim 27:

- For the reading of an optical code that is located completely in the visual field of the image capturing unit

However, Seo teaches:

With respect to claim 9 and incorporating all limitations of claim 8:

- Wherein the lighting device comprises light-emitting diodes as the light-emitting means (Column 4, Lines 33-35)

With respect to claim 10 and incorporating all limitations of claim 9:

- Wherein the light-emitting means are disposed in immediate proximity to the image capturing unit (Figure 2 teaches image capture unit (4) is in immediate proximity to LED light source (41))

With respect to claim 11 and incorporating all limitations of claim 8:

- Wherein the lighting device comprises colored light-emitting means (Column 4, Lines 33-35 teach using visible light LED's as the light source where it is common knowledge that visible light LED's come in a variety of colors)



With respect to claim 26 and incorporating all limitations of claim 1:

- For reading an optical code that is preferably displayed on a display or on a specular reflecting surface (Column 1, Lines 5-8 and Column 2, Lines 1-18)

With respect to claim 27 and incorporating all limitations of claim 26:

- For the reading of an optical code that is located completely in the visual field of the image capturing unit (Column 1, Line 66 – Column 2, Line 18)

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Conversano to use LED's as the light emitting means, as taught by Seo, as they are inexpensive, commercially available and well-known sources of light for image capturing apparatus.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Conversano et al. US 5,256,866 in view of Giordano et al. US 5,850,078.

Conversano fails to explicitly teach:

With respect to claim 14:

- Wherein the optical screen comprises a light-absorbing surface and that the light-absorbing surface is turned toward the image fitting surface

However, Giordano teaches:

With respect to claim 14 and incorporating all limitations of claim 12:

- Wherein the optical screen comprises a light-absorbing surface and that the light-absorbing surface is turned toward the image fitting surface (Figure 3 teaches cover, #18, with an inner liner having light absorbing properties (Column 2, Lines 57-58))

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Conversano to include an inner liner on the housing cover screen that has light absorbing properties, as taught by Giordano, to minimize light reflections (Column 3, Lines 45-48).

7. Claims 15-16 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conversano et al. US 5,256,866 in view of Slatter et al. EP 0 984 319 A1.

Conversano fails to teach:

With respect to claim 15:

- Comprising a housing, portions of which comprise a translucent material

With respect to claim 16:

- Wherein the translucent material is a reflection-reducing material

With respect to claim 28:

- Wherein the reflection reducing material is a translucent glass window

However, Slatter teaches:

With respect to claim 15 and incorporating all limitations of claim 1:

- Comprising a housing, portions of which comprise a translucent material (Figure 2 teaches an objective lens (#21) where light can exit the camera body (#19))

With respect to claim 16 and incorporating all limitations of claim 15:

- Wherein the translucent material is a reflection-reducing material (Figure 2 teaches an objective lens (#21) where light can exit the camera body (#19))

With respect to claim 28 and incorporating all limitations of claim 16:

- Wherein the reflection reducing material is a translucent glass window (Figure 2 teaches an objective lens (#21) where light can exit the camera body (#19))

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Conversano to use a translucent material such as an

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objective lens, as taught by Slatter, to reduce reflection being sent to the image capture device.

8. Claims 18 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conversano et al. US 5,256,866 in view of Honda US 4,950,072.

Conversano fails to teach:

With respect to claim 18:

- Wherein the positioning device comprises a protection means, preferably a padding, that protects an object placed on the positioning device from damage and that moreover shields, together with the object, the image capturing unit from ambient light

With respect to claim 24:

- For capturing an image from a display, more specifically from an LCD display or from a specular reflecting surface

With respect to claim 25:

- For capturing an image from a surface that is covered by at least on transparent layer

However, Honda teaches:

With respect to claim 18 and incorporating all limitations of claim 17:

- Wherein the positioning device comprises a protection means, preferably a padding, that protects an object placed on the positioning device from damage and that moreover shields, together with the object, the image capturing unit from ambient light (Abstract and Column 3, Line 67 – Column 4, Line 1)

With respect to claim 24 and incorporating all limitations of claim 1:

- For capturing an image from a display, more specifically from an LCD display or from a specular reflecting surface (Abstract)

With respect to claim 25 and incorporating all limitations of claim 1:

- For capturing an image from a surface that is covered by at least on transparent layer (Column 2, Lines 22-28)

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Conversano to protect the positioning device, as taught by Honda, to cover the liquid crystal panels to prevent damage (Abstract).

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9. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slatter et al. EP 0 984 319 A1 in view of Seo US 6,036,095.

Slatter fails to teach:

With respect to claim 21:

- Wherein the display is illuminated during image capturing by light having a wavelength of between 450 nm and 600 nm

With respect to claim 22:

- Wherein the display is lit by light beams of a lighting device and the light beams travel substantially along a light path of the image capturing unit

However, Seo teaches:

With respect to claim 21 and incorporating all limitations of claim 19:

- Wherein the display is illuminated during image capturing by light having a wavelength of between 450 nm and 600 nm (Column 4, Lines 33-35 teach using visible light LED's as the light source, where blue LED's have wavelengths between 430 and 470 nm)

With respect to claim 22 and incorporating all limitations of claim 19:

- Wherein the display is lit by light beams of a lighting device and the light beams travel substantially along a light path of the image capturing unit

(Figure 2 teaches light sources (41 and 91) that travel substantially along a light path of the image capturing unit (4))

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Slatter to use light in the visible wavelength spectrum, as taught by Seo, to illuminate the reading area (Column 4, Lines 16-20).

***Allowable Subject Matter***

10. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or fairly suggest to one of ordinary skill in the art, in conjunction with all the other limitations of the claims:

With respect to claim 5 and all its dependencies:

- The image capturing unit comprises a focal length that is more than double the size of the maximum diagonal of an image capturing sensor of the image capturing unit

The prior art of record fails to provide sufficient teaching or motivation to one of ordinary skill in the art to provide the additionally recited features of these claims in the combinations as claimed.

***Response to Arguments***

11. Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments filed 10 January 2008 with respect to claim 3 have been fully considered but they are not persuasive. Applicant argues that Conversano, US 5,256,866, discloses an angle of 30 degrees and mentions the possibility of selecting another larger angle. The Examiner disagrees. Conversano teaches in Column 4, Lines 23-26 that the angle may be varied and states that it "can even be increased to about 60 degrees". It does not say it can only be varied in an increasing angle direction.

Applicant's arguments with respect to claims 1, 7, 10, 12-14 and 26 have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTY A. HAUPT whose telephone number is (571)272-8545. The examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. A. H./  
Examiner, Art Unit 2876

/Michael G Lee/  
Supervisory Patent Examiner, Art Unit 2876